

# License Renewal Guidance NRC Public Meeting

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## Overview

- Revision 4 to NEI 95-10
  - Background
  - Matrix of Proposed Changes
  - Discussion of Proposed Changes
- Suggested Changes to NUREG-1801
  - Criteria for Proposed Changes
  - Categories of Proposed Changes
  - Discussion of Proposed Changes



## Background – 95-10 “Update”

- License Renewal Demonstration Project Lessons Learned Meeting 10/11/01
- Staff Guidance for Updating the Improved License Renewal Documents 12/31/01
- NRC License Renewal Public Workshop 10/22-23/02
- Class of 2003 Standard Format 01/24/03

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## 95-10 Update Sources

NEI 95-10 Update required to be consistent with:

- NUREG-1800, NUREG-1801, or Reg. Guide 1.188
- Interim Staff Guidance Documents
- Class of 2003 Standardized LRA
- 10CFR54.37(b) Considerations

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## **Identification of 95-10 Update Considerations**

- Update Considerations Based on Four Update Sources Noted Previously
- NEI 95-10 Sections Requiring Revision to Incorporate Source Document Considerations ( Exhibit 1)
- Scope of Update Summarized and Grouped by Source Document (Exhibit 2)

## **Section 1.0 – Introduction Proposed Changes**

- Revise Section 1.4 to include use of NUREG-1800, NUREG-1801, & ISGs
- Correlate Section 1.5 to BTP RSLB-2 (SRP A.3) – GSI Related to Aging
- Note Revised Standard LRA Format in Section 1.6 (Class of 2003 Standardized LRA)

## **Section 2.0 - Overview of Part 54 Proposed Changes**

- Section 2.0 – Overview of Part 54  
No Changes Required

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## **Section 3.0 Scoping Proposed Changes**

- Refer to NUREG-1800 Chapter 2
- Incorporate ISG Scoping Considerations:
  - ISG-02 SBO Scoping
  - Draft ISGs:
    - Criterion a(2) 12/03/01 & 3/15/02
    - ISG Fire Protection Scoping 11/13/02
- Include Conforming Changes to Facilitate  
Use of Class of 2003 Standardized LRA

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## **Section 4.0 IPA Proposed Changes**

### **Section 4.1 SSCs Subject to AMR**

- Refer to NUREG-1800 Chapter 2
- Remove Evaluation Boundary Terminology
- Refer to Housings ISG 05/01/02



## **Section 4.0 IPA Proposed Changes**

### **Recommend Major Revision Section 4.2 & 4.3**

- Consistent with NUREG-1801 Further Eval.
- Aging Effects Evaluations (new 4.2)
- Aging Management Program Review (new 4.3):
  - NUREG-1801 AMPs
  - Use of BTP RSLB-01 (10 Elements)
  - One Time Inspections
- Operating Experience Reviews (new 4.4)
- Incorporate New Programs (old 4.3) & IPA Documentation (old 4.4) Into New Sections



## **Section 4.0 IPA Proposed Changes**

### **Additional Aging Management Considerations**

- Address Industry OE Issued After NUREG-1801(Credit 1801 for Earlier)
- Use of Standard LRA Notes
- Incorporate ISG-01 (one acceptable way)
- Guidance for NUREG-1801 Exceptions
- Reference ISG-3 (Aging Mgmt of Concrete) & ISG-4 (Aging Mgmt of Fire Protection Sys.)

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## **Section 5.0 TLAA Proposed Changes**

- Refer to NUREG-1800 Chapter 4
- Add reference to NUREG-1801 Section X AMPs
- Recommend Revising Table 5.1-2 "Potential TLAA's" to be representative of TLAA's identified NUREG-1800 and recent LRAs

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## **Section 6.0 LRA Format & Content Proposed Changes**

- Encourage Use of Class of 2003 Standard LRA
- Modify Table 6.2-2 to Suit Class of 2003 Standard LRA
- New Appendix D for Class of 2003 Standard LRA Example
- Incorporate Conforming Changes for Class of 2003 Standard LRA in 95-10 Section 3.0 & 4.0
- Reconcile Administrative Info Requirements (LRA Section 1.0)



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## **Section 7.0 Post LRA Submittal (New)**

- Update of License Renewal Application for CLB Changes (old 6.3)
- LRA Appeals
- 54.37(b)  
(FSAR Update for Aging Management of Newly Identified SSCs)



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## **Appendices Proposed Changes**

- Refer to Fuse Holder ISG in Appendix B
- Appendix D (New) Standard License Renewal Application (SLRA)
- Appendix E (New) Provides Summary Information for All ISGs (Draft & Approved).

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## **Schedule- Next Meetings**

- Kickoff Meeting – January 22
- Issue Rough Draft - March 14
- Rough Draft Meeting – March 28
- Smooth Draft Meeting – May 28
- Comment Resolution Meeting – June 30
- Submit to NRC for Endorsement July 25

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## **Suggested Industry Changes to NUREG-1801 & NUREG-1800**

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## **Criteria for NUREG-1801/1800 Changes to be Proposed by NEI**

- Conforming Changes for Rev. 4 NEI 95-10
- Simplify Preparation/Review of LRA
- Perceived Ease of Justification or Approval
- Criteria for Limiting or Prioritizing Changes

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## Categories of Proposed Changes to NUREG-1801

- Addition of Components
- Changes to Promote Consistency Within NUREG-1801
- Addition of Typical Industry Materials
- Efficiency of LRA Preparation or NRC Review
- Other Enhancements / Considerations



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## Discussion:

- Majority of Potential Changes related to material-environment-aging effect (M-E-AE) groups
- Use of LRA Standard notes C & D for additional components
- M-E-AE Update Considerations
  - Individual Line Item Changes
  - M-E-AE Applicable to Many Sections



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**NEI 95-10**  
**INDUSTRY GUIDELINE FOR IMPLEMENTING THE LICENSE RENEWAL RULE**

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Appendix A	10 CFR Part 54	A-1
Appendix B	Typical Structure And Component Groupings And Active/Passive Determinations For The Integrated Plant Assessment	B-1
Appendix C	References	C-1

**Exhibit 1**  
**NEI 95-10 Updates Based on Industry Source Document Considerations in Exhibit 2**

NEI 95-10 Section	NUREG-1800 NUREG-1801 RG-1.188	ISG	Class of '03 standard format	54.37(b)
1.0 Intro				
1.1 Background				
1.2 Purpose and Scope				
1.3 Applicability				
1.4 Utilization of GALL, SRP and ISGs	101	201		
1.5 Resolution of Current Safety Issues	102			
1.6 Organization of the Guideline			301	
2.0 Overview of Part 54				
3.0 Scoping	103			
3.1 SSCs WSLR	103	203, 204, 211		
3.2 Intended Functions				
3.3 Documenting Scoping	104			
4.0 Integrated Plant Assessment				
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4.2 AMR	107, 108, 109, 110, 115	206, 207, 208		
4.3 New Programs and Inspections	110, 111			
4.4 Documenting IPA				
5.0 TLAA	112, 113			
5.1 TLAA	114			
5.2 Exemptions				
5.3 Documenting TLAA				
6.0 LRA Format and Content				
6.1 General Info	115	208		
6.2 LRA Format and Content Guidance	116		301	
Table 6.2-2 LRA Guidance	115, 117, 118	208	302	
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7.1 Identify CLB Changes				
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7.3 54.37(b)				401
App. A 10 CFR Part 54				
App B Active/Passive		209		
App C References		210		
App D Standard LRA NEW			301	
App E ISG Summary Info NEW				

**Exhibit 2**  
**Initial NEI 95-10 Update Considerations**

Index Number	Recommended NEI 95-10 Update
<b>NUREG-1800, NUREG-1801, &amp; Regulatory Guide 1.188</b>	
101	Refer to BTP IQMB-1, (SRP A.2) & Gall quality appendix in NEI 95-10 section 1.4
102	Correlate 1.5 to BTP RLSB-2, (SRP A.3)
103	Refer to SRP section 2.1, 2.3, 2.4 and 2.5 in NEI 95-10 sections 3.0, 3.1 and 4.1.
104	Refer to SRP section 2.2 in NEI 95-10 section 3.3.
105	Remove "evaluation boundary" terminology, as it does not appear in SRP or the Rule. (Actually it appears once in SRP where reference is made to an example since removed from NEI 95-10.)
106	Note piece part approach for heaters with pressure boundary intended function. For SRP as well as consistency within NEI 95-10.
107	Address industry-operating experience after the issuance of the GALL report. Credit GALL for operating experience prior to 4/01. (SRP 3.x.3.1)
108	Modify 4.2.1.2 to be consistent with and reference BTP RLSB-1, (SRP A.1).
109	Refer to SRP chapter 3 in 95-10 section 4.2. Also refer to BTP RLSB-1, (SRP A.1).
110	Acknowledge GALL as containing set of aging effects requiring management as well a collection of programs to manage the aging effects.
111	Modify 4.3 to be consistent with and reference BTP RLSB-1, (SRP A.1).
112	Refer to SRP chapter 4 in 95-10 section 5.0.
113	Add reference to SRP Chapter 4.
114	Add reference to GALL X programs to 5.1.3.
115, 208	Incorporate Nov 23, 2001 ISG-01 "One Acceptable Way". In other words GALL is not the only way. GALL page 3 says the same thing.
116	Applicant may consider noting differences from the SRP expectations in application and providing detailed explanation.
117	Attempt to reconcile administrative information requirements in NEI 95-10, Table 6.2-2, SRP chapter 1, RG-1.188, 54.17 and 54.19.
118	Plant specific program names should be correlated to GALL Chapter XI names. An alphabetical list as well as a list by GALL Program numbers should be provided.

<b>NRC Interim Staff Guidance Documents</b>	
201	Revise Section 1.4 to NEI 95-10 to discuss ISGs, specifically 12/2/01 letter.
202	Add Section 6.4 to NEI 95-10 to discuss Appeals Process, specifically pending NRC letter.
203	Modify Criterion 2 scoping per ISG 12/3/01 and 3/15/02.
204	Modify Criterion 3 scoping per SBO ISG-02, 4/1/02 letter.
205	Refer to Housings ISG, letter 5/1/02.
206	Refer to Aging Management of Concrete ISG-03, letter 4/5/02.
207	Refer to Aging Management of FP systems ISG-04, letter 1/28/02.
208, 115	Incorporate Nov 23, 2001 ISG "One Acceptable Way". In other words GALL is not the only way. GALL page 3 says the same thing.
209	Refer to Fuse Holder ISG, letter 5/16/02.
210	Add ISG letters as references. Issue with lack of final positions.
211	Add Fire Protection Scoping ISG letter 11/13/02
<b>Standardized LRA documents prepared by the Class of 2003</b>	
301	Encourage the Class of '03 LRA format
302	Modify Table 6.2-2 to suit class of '03 format.
<b>10CFR 54.37(b) considerations identified by NEI Task Group Members</b>	
401	Add section 4.5 to describe 54.37(b) process.

### EXHIBIT 3

Recommended Changes to NEI 95-10 based upon the  
October 3, 2001 NRC Lessons Learned Letter on the Demonstration Project

NRC Observ. #	Recommended 95-10 Update	95-10 Ch 4	95-10 Ch 6.2	95-10 other
1.1	Deviations from the SRP-LR should be disclosed in the application and should be explained in sufficient detail.	X	X	
1.2	Encourage the SRP-LR format		X	
1.3	Engineering judgement may be used to determine "consistency with" GALL programs. Differences from the GALL report should be documented.	X	X	
1.4	Plant specific program names should be correlated to GALL Chapter XI names when they are "consistent".	X	X	
1.5	It is not necessary to duplicate the list of systems in the general description of the aging management program in Appendix B.		X	
1.6	Use the latest version of SRP-LR.	X		1.4
2.1	Incorporate Nov 23, 2001 ISG "One Acceptable Way". Note the need for additional staff reviews	X		
2.2	Provide guidance to reference a program evaluated in the GALL report for a component, not covered by the GALL report, if it involves similar intended function, environment, material, aging effect, system, and ASME Code Class (if applicable) with another component. (see also 1.1)	X	X	
2.3	Document when GALL specific conditions (or further evaluations) are met.	X	X	
2.4	See observation 1.2 & 1.6	X	X	1.4
2.6	Review and incorporate as necessary, certification process guidance from Reg Issue Summary 2001-18	X	X	
2.7	Address industry operating experience after the issuance of the GALL report	X	X	
2.8	Provide guidance to address programs to be developed in the future that are consistent with GALL.	X	X	

2.9	Review industry wide operating experience in addition to plant specific experience for aging effects not addressed in the GALL.	X	X	
2.11	Further evaluations specified by the SRP-LR and GALL should consider information in both documents.	X		
2.13	Consider providing descriptions of "uncommon components" not addressed in the GALL. (see also 2.2)	X	X	
2.14	Document the use of engineering judgement when determining "technical meaning". (see also 1.3 & 1.1)	X	X	
3.1	Document evaluation of a component, not covered by the GALL report, if it involves similar intended function, environment, material, aging effect, system, and ASME Code Class (if applicable) with another component. (see also 1.1)	X	X	
3.2	Provide the basis for the determinations on materials and aging effects that are not addressed in GALL and justify them in the application		X	
3.3	Use the latest version of GALL	X	X	1.4
4.5	Ensure that license renewal application sections that reference each other are consistent.		X	
6.3	Provide final safety evaluation report descriptions in the application similar to the level of detail provided in the SRP-LR.		X	
7.1	Documentation that identifies the "roll up" of components into the general component description of the SRP-LR table should be available for onsite inspection	X		
7.2	Documentation should be available for NRC review of one time inspections to verify bounding condition for the corresponding GALL AMP.	X		
7.3	Auditable on-site documentation should be clearly linked to the LRA details and provide supporting details.	X		



### Exhibit 1

Chapter VII C2. Closed Cycle Cooling Water (CCCW) System (Include stainless steel for CCCW piping and flow orifice)

Ref No.	Structure and/or Component	Material	Environment	Aging Effect/Mechanism	Aging Management Program	Further Evaluation
C2.1-a C2.1.1	Piping Pipe, fittings, flanges	Carbon steel, Stainless steel	35C (95F) treated water	Loss of material/ General (only for carbon steel), pitting, and crevice corrosion	Chapter XI.M21 Closed Cycle Cooling Water System	No
C2.2-a  C2.2.1	Valves (check, hand, control, relief, solenoid and containment isolation valves) Body and bonnet	Carbon steel Stainless steel	35C (95F) treated water	Loss of material/ General (only for carbon steel), pitting, and crevice corrosion	Chapter XI.M21 Closed Cycle Cooling Water System	No
C2.5-a C2.5.1	Flow Orifice Body	Carbon steel, Stainless steel	35C (95F) treated water	Loss of material/ General (only for carbon steel), pitting, and crevice corrosion	Chapter XI.M21 Closed Cycle Cooling Water System	No

### Exhibit 2

Chapter VII D4. Shutdown Cooling System (Include carbon steel valves)

Ref No.	Structure and/or Component	Material	Environment	Aging Effect/Mechanism	Aging Management Program	Further Evaluation
E4.1-a E4.1.1	Piping Piping and fittings	Carbon steel, Stainless steel	Oxygenated water up to 288C (550F)	Loss of material/ General (only for carbon steel), pitting, and crevice corrosion	Chapter XI.M2 "Water Chemistry for BWR Water in BWRVIP-29 (EPRI TR-103515)  The AMP is to augmented by verifying the effectiveness ....	Yes, detection of aging effects to be evaluated
E4.3-b (NEW)	Valves (check, control, hand, motor, operated and relief valves) Body and bonnet	Carbon steel Stainless steel	Oxygenated water up to 288C (550F)	Loss of material/ General (only for carbon steel), pitting, and crevice corrosion	Chapter XI.M2 "Water Chemistry for BWR Water in BWRVIP-29 (EPRI TR-103515)  The AMP is to augmented by verifying the effectiveness ....	Yes, detection of aging effects to be evaluated